

Hello!

Welcome to my presentation! I'm excited to share how I tackled a real-world financial challenge using business analysis and demonstrating the skills that make me a strong candidate for analytical roles in **the utility and energy sector**.

Real-World Impact

Analyzed \$53K+ in late payments to optimize cash flow

Technical Skills

SQL, Snowflake, Tableau, and financial modeling



Business Value

Actionable insights driving measurable improvements

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Optimizing Utility Accounts Receivable: A Cash Flow Analysis

This project showcases my ability to transform raw data into strategic business solutions, combining technical expertise with business acumen to solve complex cash flow challenges.

The Challenge	The Impact
Analyzed 2,467 utility invoice records to address critical late payment issues impacting company liquidity and operational efficiency.	Identified \$53,961 in late payments with actionable recovery strategies targeting high-risk customer segments.

Project Overview & Problem Statement

\$53,961	3	63.47%
Total Late Amount	Average Days Late	Collection Rate
Critical cash flow impact requiring immediate attention	Some high-risk customers extending to 14+ days	Significant room for improvement in recovery

Business Context: Working with sample utility invoice data similar to companies in energy sector, I discovered critical patterns affecting cash flow. Paper billing customers averaged 5.9 days late versus 2.4 days for electronic billing showing a clear operational inefficiency.

☐ **Key Finding:** The top 10 late payers alone tied up over \$16,000 in working capital, with fluctuating trends worsening in late 2013.

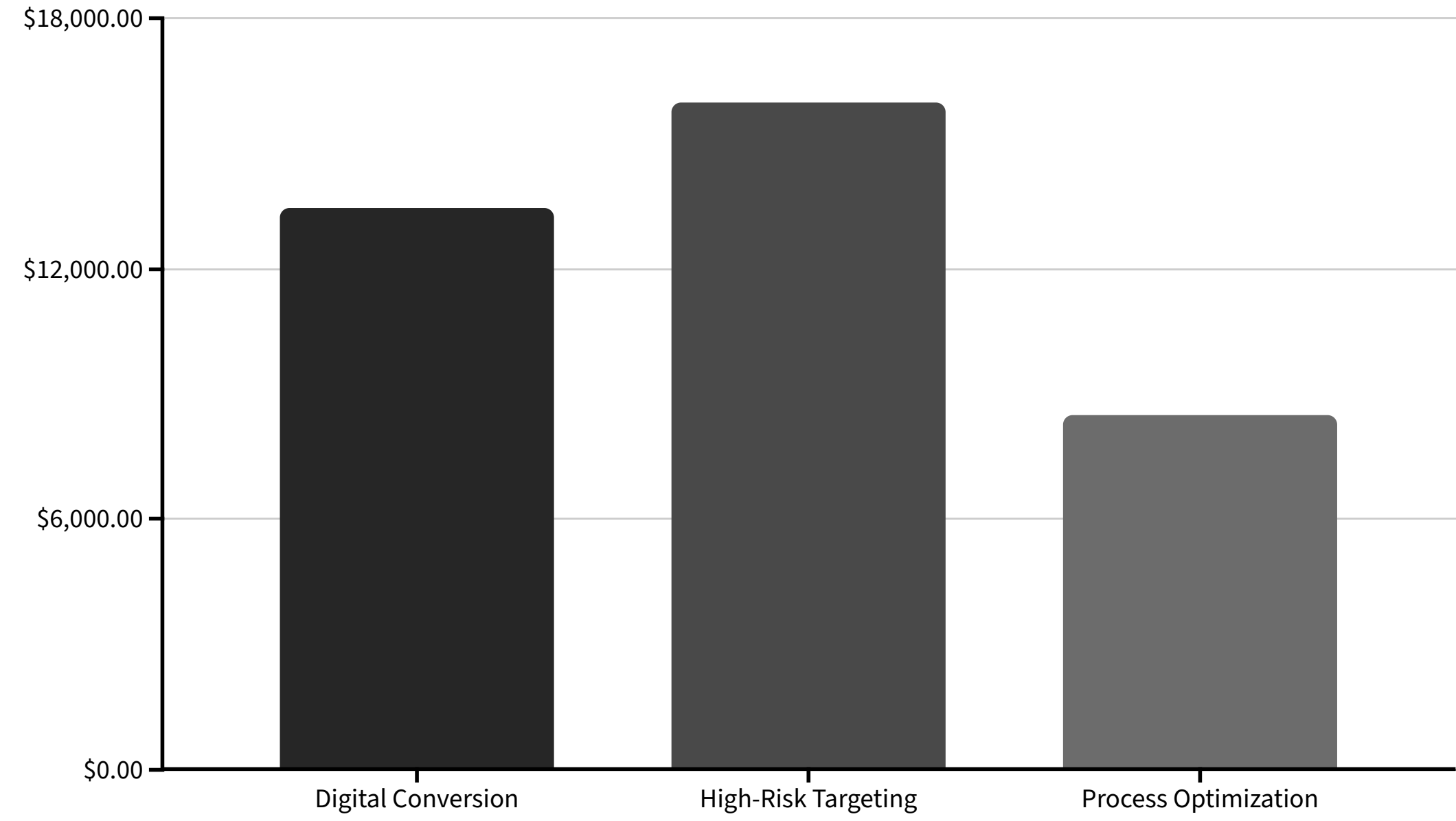
Data Analysis Approach

01 Data Infrastructure Ingested 2,467 records into Snowflake, creating optimized database schema and tables for scalable analysis	02 SQL Analysis Developed complex queries and views for payment behavior analysis, including CUSTOMER_RISK_GROUPS segmentation
03 Risk Segmentation Categorized customers into High (>10 days, \$14K risk), Medium (\$17K risk), and Low (\$21K risk) groups	04 Visualization Created three interactive Tableau dashboards: Performance, Risk Analysis, and Recovery Planning

Critical Insights	Technical Highlights
<ul style="list-style-type: none">94% late payment rate for worst-performing customersNo correlation between invoice size and payment delaysPaper billing doubles payment delay times83 high-risk customers drive majority of delays	<ul style="list-style-type: none">Advanced SQL with UNION ALL queries for risk viewsCustomer behavior pattern analysisTime-series trend identificationInteractive dashboard development

Proposed Cash Flow Recovery Plan

Digital Conversion	Risk-Based Actions	Quick Wins
Convert 96 paper-bill customers to electronic billing for 40% delay reduction and \$13,458 cash flow improvement	Segment strategies: High-risk (immediate calls), Medium-risk (email follow-ups), Low-risk (automated reminders)	Target top 20 late payers to recover \$16K+ in tied-up capital with measurable monthly tracking



Expected Impact: Overall 40% reduction in late payments, improved liquidity management, and significant ROI from data-driven customer targeting strategies.

Thank You!

Thank you for your time and consideration. This project demonstrates my ability to combine technical skills with business acumen to deliver measurable results, exactly what business analytics and data roles demand.

Ready to Contribute

I'd love to discuss how my data analytics expertise can drive similar value for your organization.

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